## **ABSTRACT**

An evaporator including an evaporating chamber equipped with a drainage. The drainage drains accumulated liquid from the evaporator's lower parts and includes an external expansion driven injector and/or an external pump. The evaporator can be used e.g. in a heat exchanger, e.g. in a heat pump system or air condition system, and the vacuum driven injector can be integrated with an expansion device of the heat exchanger. A condenser can be used together with the evaporator in a heat exchanger of the plate type realizing an integrated superheater/supercooler. This is accomplished by the definition and use of delimited interacting zones through which the cooling medium circulates under heat exchange with itself.